

Climate, Water Scarcity and Management in Brazil and Chile

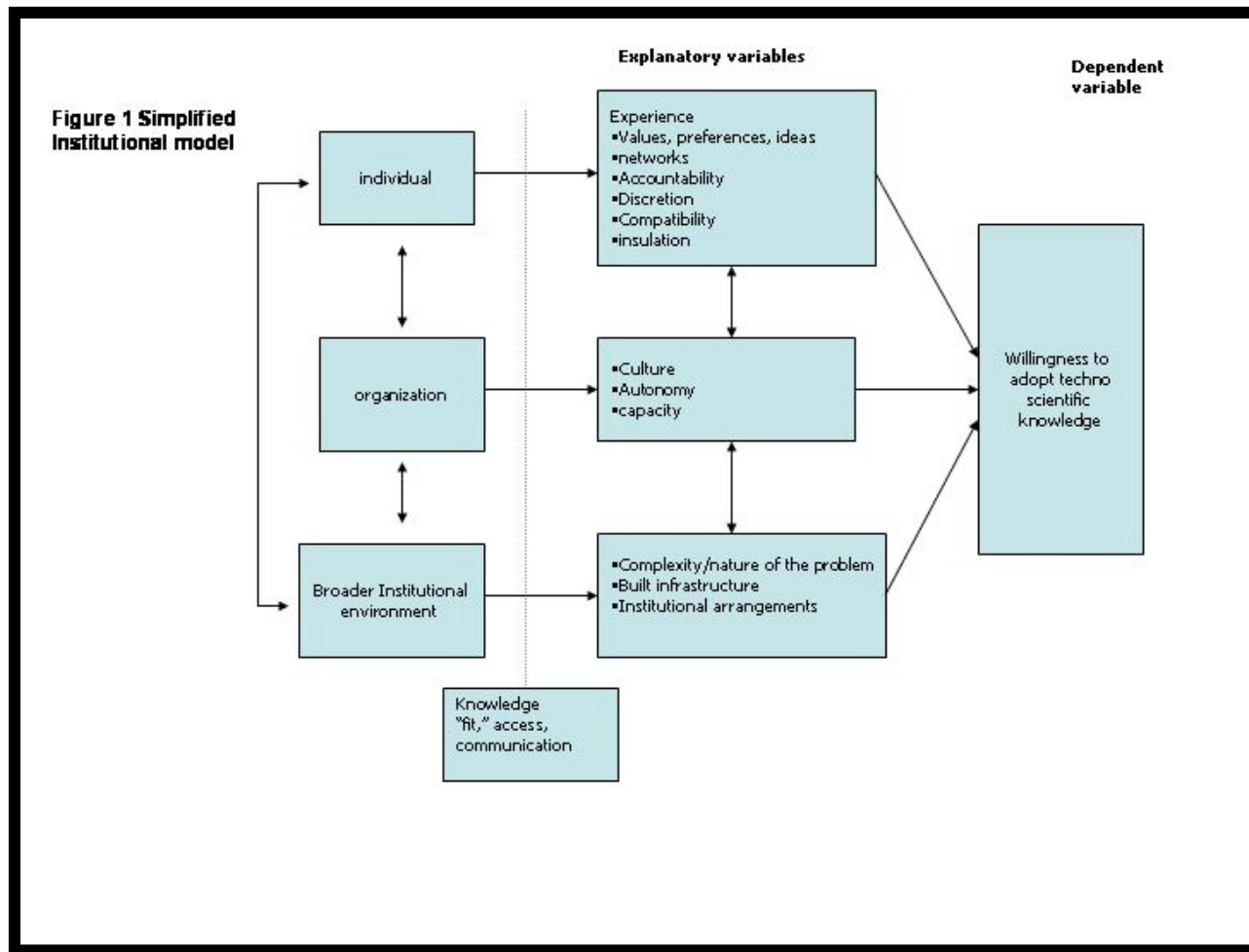
Preliminary Findings

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Factors shaping use of SCF by water managers across three river basins in Brazil



| River Basin Councils | Number of Interviews | % of member who reported climate forecast use in within the Committee |
|-----------------------------|-----------------------------|--|
| Baixo Jaguaribe | 29 | 75,9 |
| Itapicuru | 25 | 48,0 |
| Pirapama | 17 | 47,1 |
| Alto Tietê | 30 | 36,7 |
| Araçuaí | 14 | 14,3 |
| CEIVAP | 59 | 67,8 |
| Lagos São João | 16 | 43,8 |
| Litoral Norte | 34 | 35,3 |
| Pará | 26 | 53,8 |
| Paracatú | 16 | 43,8 |
| Piracicaba | 17 | 88,2 |
| Rio das Velhas | 24 | 20,8 |
| Sapucaí Mirim | 23 | 30,4 |
| Gravataí | 27 | 29,6 |
| Itajaí | 58 | 62,1 |
| Lago da Conceição | 25 | 16,0 |
| Santa Maria | 29 | 65,5 |
| Tibagi | 32 | 28,1 |

Tech

| | Relevance of climate info | info makes decisions easier | Info is availabl e | Info accessibl e | Unequal tech knowledge | Unequal economi c power | Unequal political power |
|---------------------------|------------------------------------|--------------------------------------|--------------------------|------------------------|------------------------------|----------------------------------|-------------------------------|
| | | | | | | | |
| Paraíba do Sul | 7.6 | 100.0 | 64.4 | 72.9 | 64.4 | 52.5 | 57.6 |
| Itajaí | 7.1 | 93.1 | 68.4 | 77.6 | 75.9 | 34.5 | 67.2 |
| Alto Tietê | 6.5 | 80.0 | 40.0 | 36.7 | 83.3 | 40.0 | 60.0 |
| Araçuaí | 6.8 | 100.0 | 28.6 | 64.3 | 78.6 | 35.7 | 50.0 |
| Velhas | 6.9 | 87.5 | 43.5 | 54.5 | 82.6 | 37.5 | 41.7 |
| Pará | 7.1 | 92.0 | 57.7 | 73.1 | 69.2 | 23.1 | 50.0 |
| Pirapama | 7.2 | 94.1 | 52.9 | 70.6 | 88.2 | 52.9 | 47.1 |
| Sapucaí Mirim | 5.9 | 91.3 | 82.6 | 69.6 | 60.9 | 26.1 | 65.2 |
| Litoral Norte | 6.9 | 88.2 | 82.4 | 78.8 | 44.1 | 14.7 | 33.3 |
| Baixo Jaguaribe | 7.8 | 93.1 | 32.1 | 86.2 | 79.3 | 27.6 | 62.1 |
| Paracatu | 7.1 | 87.5 | 43.8 | 37.5 | 37.5 | 31.3 | 31.3 |
| Lagoa da Conceição | 5.9 | 83.3 | 25.0 | 50.0 | 88.0 | 24.0 | 54.2 |
| Gravataí | 7.5 | 100.0 | 77.8 | 59.3 | 66.7 | 11.1 | 44.4 |
| Santa Maria | 8.0 | 96.6 | 93.1 | 82.8 | 72.4 | 31.0 | 27.6 |
| Piracicaba | 7.3 | 88.2 | 94.1 | 64.7 | 35.3 | 52.9 | 52.9 |
| Tibagi | 6.8 | 96.7 | 51.6 | 61.3 | 61.3 | 35.5 | 77.4 |
| Itapicuru | 8.2 | 96.0 | 76.0 | 88.0 | 64.0 | 32.0 | 20.0 |
| Lagos de São João | 6.8 | 100.0 | 100.0 | 100.0 | 43.8 | 6.3 | 43.8 |
| Total | 7.1 | 92.9 | 62.7 | 69.4 | 67.5 | 32.6 | 51.4 |

Preliminary findings

- the majority of committee members report that climate information is relevant to make decisions at the basin level,
- the majority of members find that use of technoscientific knowledge in general is the highest source of inequality within the basins (more than political and economic disparity).
- Although the majority of members find that the use of technoscientific knowledge makes decisions easier, considerably fewer members find it available or accessible

Factors shaping SCF use in water management in Chile across three basins

- Six variables: size of the organizations, professional human resources, pattern of appointment of managers, use of technical information within the organization, access to information, degrees of separation between decision making and implementation, flexibility in decision making.
- Aggregation of these variables into three indicators: Modernization of organizational management; Modernization of organizational culture; Development of participation mechanisms
- Preliminary results:
 - by basin, Limarí shows the highest score in relation to organizational culture and practices, while regarding participation Maule and Limarí are best.
 - by users, private companies show the highest scores in relation to management of water resources, as well as in the development of organizational culture and participation. This means that private companies are the users' organizations showing the highest levels of development and modernization of their organizational, productive, and economic activity as well as the most flexible and better able to take advantage of SCF as a decision tool.